

Corps Facts

Dredge Goetz

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Mission

The U.S. Army Corps of Engineers, St. Paul District, uses the Dredge William L. Goetz to help maintain 850 miles of the Upper Mississippi River, 335 miles of the Illinois River and other inland rivers. It was acquired in the spring of 2005. Typically, it will dredge 1 to 2 million cubic yards of sediment out of the 9-foot navigation channel each year. It has replaced the 70-year-old Dredge William A. Thompson and is the Corps' newest and only major cutterhead style dredge.

The Dredge Goetz is one of three vessels that will replace the Thompson and make up the St. Paul District's new dredging fleet. A towboat, the General Warren, is expected to arrive in the district in spring 2007; and the quarters' barge, the Taggatz, is expected to arrive in spring 2008.

History

The Corps of Engineers commissioned the building of the Goetz in 2001 and awarded the contract in September of 2003. Rowan Electric, Inc., of Houston, which owns the design company Oilfield-Electric-Marine, also of Houston, and Le Tourneau Shipyard in Vicksburg, Miss., built the Goetz. After a 10-day maiden voyage up the Mississippi River, the Dredge Goetz arrived at its new home, the Corps' Fountain City Service Base in Fountain City, Wis., on May 15, 2005. Its christening ceremony was held June 24, 2005, at Winona, Minn.

The vessel cost \$9.8 million. It is named after William L. Goetz, a Corps' employee from 1957 until 1990. Goetz served as chief of the district's construction-operations division from 1970 until his retirement in 1990 and spent his entire career championing a reliable and efficient 9-foot channel system. Corps' employees named the dredge after Goetz as a testament to his dedication to the Corps of Engineers, the Upper Mississippi River and the nation.

Dredge Features

The Dredge Goetz is 225-feet long, 40-feet wide and 600 tons. Its steel hull is 8-feet deep, and its draft is 5 feet. It can dredge a maximum of 1,000 cubic yards per hour up to 28 feet. It is powered by a 4,010 hp diesel engine. The Goetz has a 22-inch suction pipe diameter with a 20-inch discharge pipe diameter. It has 28-feet dredging depth capability and a 275-foot cut swing. With its booster barge, it is capable of pumping sand about 2 miles at 1,000 cubic yards per hour.

The Goetz makes use of new and innovative technology to make dredging safer, more efficient and better for the environment. The new towboat will have improved radar and more power than the Dredge Thompson, thereby making it safer for pilots and employees. A relatively new technology on the Goetz, called the "traveling spud," allows the dredge to be advanced more efficiently, and with the aid of a computer, operations can be automated rather than manually pulling the four foot swing levers and brakes. This automation and use of a nuclear density production meter is expected to increase job production by up to 30 percent. Additionally, there are virtually no hydraulic systems onboard the Goetz that could pollute our rivers. AC motors driven by Caterpillar 3516B engines running at 1,200 rpm, power generators that turn the motors of the dredge pump, winches, spud carriage and hoists. This consistent engine output should result in less fuel consumption, as well as lead to a longer engine life.